

*Unit 1  
Work Report*

Navajo District  
Box 1151  
Gallup, New Mexico

July 25, 1957

Mr. Ray H. Kerr,  
Junior Soil Surveyor,  
Box 517,  
Durango, Colorado.

Dear Ray:

Herewith is enclosed a copy of your Land Management Unit One, Detailed Conservation Survey, Work Report, together with the original. My comments and suggestions follow.

As a whole it is good; a great deal of information is included, but I believe that you will be able to see where some considerable improvements can be made at various points in the body of the report.

You will note first that I have made a table of contents, which was missing in the original, and which is an excellent device for checking the various points of the report.

The acreage of the Unit is now officially 1,058,630 acres, not 1,097,673 acres as originally shown. ~~XXXXXXXXXXXX~~ ~~XXXXXXXXXXXX~~ Incidentally, if Table VIII, Acreage of Soil Types in Grazing Land Soil Groups by Sub-Units, was compiled before you left, it has since been lost in transit between this office and the Post Office where I had the rest of the typing finished. So, it will be necessary for you to complete that table, using the form I am enclosing with the report. I would do it but believe you are more familiar with the figures in the compilation sheets than I am.

You will note that I have listed another table showing the acreage of the Agricultural lands, but that will have to be compiled from the map proper - something that will have to be done right here in the office rather than there.

You might examine the tables throughout the report to see that all the abbreviations are fully explained.

On page 8 I want to call your attention to the first paragraph under EROSION because it seems to me that over-utilization may have something to do with any depletion of vegetative cover and concomitant exposure of soils to wind erosion. Or is a certain amount of soil drifting normal out there?

P. S. I suggest that you show how heavy impervious

F. W.	297
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R. H. Kerr: 1st I Week Report.

soils intensify the effect of sheet erosion ... at Kaibito. The mention of specific types is strongly urged by Mr. Carpenter on the basis that the soil type is the unit of soil discussion, not the series. Of course, there are times when the soil series may be mentioned with better effect than that of the various types, so this is no hide-bound rule-of-thumb to be taken too literally.

Sentences like, "Critically eroded areas will readily warrant restriction of livestock or a deferred grazing program," is an easy-flowing generalization invented by Mr. Thomas; but it seems to me that without further comments relative to specific sites or mention of their location on the maps it is of small practical value. The location of areas recommended for mechanical treatment must be clearly indicated, either on the maps by the red symbols suggested by Mr. Lovald or other red symbols, or by a written description incorporated in the body of the text.

On page 15 I again wish to call your attention to the use of the somewhat indefinite phrase, "... erosion are at a minimum," without further clarifying it.

On page 18 it seems that you have made use of those slips of the pen that all of us are more or less subject to when you wrote, "Shallowness of heavier alluvial soils has in itself confined the extent of gullying on soils of this group." Are alluvial soils shallow? And if so, how could the depth of a soil influence the extent of gullying?

On the same page, I suggest you carefully examine the last paragraph under the head IMPROVEMENT PROGRAM FEASIBLE FROM SOILS STANDPOINT with particular attention directed to the geography of the statement and the mention of types instead of series.

On page 29 you will note a term missing in the second paragraph following the fifth word. I think this paragraph should be re-written with the idea of emphasizing the soil type also. In this instance it might be sufficient to say, "All soil of this series, etc."

After more mature consideration, you may find more to say in the SUMMARY OF RECOMMENDATIONS, or perhaps better ways to say the same thing?????

These comments should be ample to give you an idea of the trend of other marginal comments in the text of the report without my saying more of them here. I may say that I am sure of that statement in the light of the character of your last report. So go to it, and I wish you luck.

Sincerely yours,

Lewis K. Armstrong  
Correlator

F. W. 298

DISTRICT NO. 1 and 5

Armstrong

Lab. No.	Field No.	TS	KuCo <sub>2</sub>	Sand	Silt	Clay	Disp. %	Gravel %	CaCO <sub>3</sub> %	On	Water Holding Capacity %
L068	811-03-01	.06	0	57.3	22.4	20.3	16.7	30.3	0.5	1.27	36.5
L069	811-03-02	.02-	0	73.4	17.3	9.2	0	52.3	0.5	0.92	42.6
L070	811-03-03	.135	0	43.0	19.4	37.6	13.0		0.6	1.12	49.3
L071	811-01-01	.02-	0	92.2	1.5	6.3	17.0		0	0.24	27.5
L072	811-01-02	.02-	0	93.3	1.5	5.2	32.8		0	0.60	25.3
L073	811-01-03	.02-	0	85.6	3.6	10.6	7.8		0	0.38	29.3
L074	811-01-04	.02-	0	74.8	3.9	21.3	13.2		0	0.59	34.7
L075	811-01-05	.03	0	84.9	2.9	12.2	13.0		2.53	1.05	29.1
L076	811-01-06	.11	0	47.6	19.6	32.3	10.2		3.2	.60	42.7
L077	811-01-07	.13	0	45.4	2.5	34.1	4.5		4.4	1.02	42.2

F. W. 299

DISTRICT ED. 1 and 3

Armstrong

Lab. No.	Field No.	TS	NaCO <sub>3</sub>	Sand	Silt	Clay	Disp. %	Gravel %	CaCO <sub>3</sub>	On	Water Holding Capacity %
4068	811-03-01	.06	0	57.3	22.4	20.3	16.7	30.5	.09	1.27	36.5
4069	811-03-02	.02-	0	73.4	17.5	9.1	0	52.3	0.5	0.92	42.6
4070	811-03-03	.135	0	43.0	19.4	37.6	13.0		0.6	1.12	49.5
4071	811-01-01	.02-	0	92.2	1.5	6.3	17.0		0	0.21	27.5
4072	811-01-02	.02-	0	93.3	1.5	5.2	32.8		0	0.60	25.5
4073	811-01-03	.02-	0	85.8	3.6	10.6	7.9		0	0.38	29.3
4074	811-01-04	.02-	0	74.8	3.9	21.3	15.1		0	0.52	34.7
4075	811-01-05	.03	0	84.9	2.9	12.2	15.0		2.55	1.03	29.1
4076	811-01-06	.11	0	47.6	19.6	32.8	10.2		5.2	.60	42.7
4077	811-01-07	.13	0	45.4	20.5	34.1	4.5		4.4	1.02	42.2

F. W. 300